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EXAMINER

NGUYEN, DUC M

ART UNIT PAPER NUMBER

2685

DATE MAILED: 06/25/2004

27

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,918

Applicant(s)

PARUPUDI ET AL.

Examiner

Duc M. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-27,29-48 and 50-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-27,29-48 and 50-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 13, 16, 17, 22, 26.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is in response to applicant's response filed on 4/5/04, and the letter filed on 5/7/04 regarding the interview summary has been placed in the application file.

Claims 2-27, 29-48, 50-58 are now pending in the present application.

Information Disclosure Statement

1. The references listed in the information disclosure statements submitted on 9/2/03, 11/14/03, 1/2/04, and 3/8/04 have been considered by the examiner (see attached PTO-1449).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims **3, 53, 55** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 3, 53, 55 recite the limitation "information pertains to a user of the cellular phone", this contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

4. Claim 48 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 48 recites the limitation "automatically adjust one or more of its settings so that it behaves in a manner that has been defined for that location **by someone other than a user** of the cell phone", this contains new subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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6. Claims **6, 8-9, 11-12, 14-18, 21-27, 29-30, 36, 38, 40, 41, 54, 57-58** are rejected under 35 U.S.C. 102(e) as being anticipated by **Kuwahara** (US Patent Number **6,389,288**).

Regarding claims **6, 58, Kuwahara** discloses a mobile terminal (cellular phone) capable of executing location-related services such as phone settings, call settings (Figs. 1, 13, 21, and col. 7, line 52 - col. 8, line 52), which would include all the claimed limitations, wherein the receiving on "reported location information" would read on "wirelessly receiving information that pertains to a context " as claimed, the "setting of incoming calls alert method or screening" as shown in Fig. 13 would read on "modifying at least one behavior of the cellular phone responsive to the context", location information from several mobile communication networks would read on "different type of context providers" as claimed (see col. 7, lines 60-63), and it is clear that after receiving location information from mobile communication networks, the mobile terminal using only its phone and its associated on-board componentry (see Fig. 1) to determine its location (context) as claimed (see col. 8, lines 1-38).

Regarding claims **8-9, 11-12, 14-18, 21-27, 29-30**, they are interpreted and rejected for the same reason as set forth in claim **6** above. In addition, **Kuwahara** discloses

- multiple different context providers (see mobile communication networks in col. 8, lines 1-15);
- sound or vibration would read on "ringer mode on/off" (see Figs. 13, 21);
- computer-readable media (see control unit 403 in Fig. 4);

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- change behavior when no longer at the current location (see steps S43, S44 in Fig. 25);

- location type (office, meeting room) with attributes (setting of screening, alert mode) defining a behavior (see area names and zones in Figs. 13, 21);

- call forwarding behavior (see setting of call destination, col. 9, lines 3-5);

Regarding claims **36, 41**, they are interpreted and rejected for the same reason as set forth in claim **6** above. In addition, **Kuwahara** defines class types (see home, office, library in Fig. 13), each one is associated with a location (see Zones in Fig. 13) and various attributes (see setting of screening, alert mode in Fig. 13) defining a behavior as claimed.

Regarding claims **38, 40**, they are interpreted and rejected for the same reason as set forth in claim **6** above. In addition, **Kuwahara** discloses the behavior pertains to “ringer mode on/off” (see sound or vibration, Figs. 13, 21) and call forwarding behavior (see setting of call destination, col. 9, lines 3-5) as claimed.

Regarding claims **54, 57**, they are interpreted and rejected for the same reason as set forth in claim **6** above. In addition, the report location information detecting means 1 in Fig. 1 would read on the “context service module”, and the report location information managing means 2 would read on the “application program interface” as claimed.

7. Claims **24-27, 29-30, 58** are rejected under 35 U.S.C. 102(e) as being anticipated by **Kowaguchi et al** (US Patent Number **6,201,973**).

Regarding claims **24, 58, Kowaguchi** discloses a mobile terminal (cellular phone) capable of executing location-related transmission inhibition mode, comprising

- receiving means configured to wireless receive multiple different forms of information pertains to a current location of a cellular phone and use said multiple different forms of information pertains to ascertain the current location (see Figs 6-7 and col. 2, lines 9-28);
- means to modify at least one behavior (inhibition transmission) associated with the cellular phones responsive to said information (see col. 2, lines 5-8).

Regarding claim **25**, it is rejected for the same reason as set forth in claim **24** above. In addition, **Kowaguchi** further discloses the information (location information) pertains to cellular phone setting (transmission inhibition mode or normal mode) that are associated with the current location (see Figs 4-5).

Regarding claim **26**, it is rejected for the same reason as set forth in claim **24** above. In addition, it is clear that the transmitting location information from base stations pertains with a defined location type of which the location is an instance as claimed.

Regarding claim **27**, it is rejected for the same reason as set forth in claim **24** above. In addition, it is clear that **Kowaguchi** would disclose a modify means as claimed when it is no longer at the current location (see Fig. 5).

Regarding claims **29-30**, they are rejected for the same reason as set forth in claim **24** above. In addition, it is clear that the transmitting location information from base stations is associated with a location type (i.e, hospital) that has attributes that define a cellular phone behavior/settings (transmission inhibition, see Fig. 4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7, 10, 19-20, 31-35, 37, 39, 42-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kuwahara** (US Patent Number 6,389,288).

Regarding claims 31, 42, they are interpreted and rejected for the same reason as set forth in claim 6 above. In addition, since the reported location information (see Zones 1, 2, 3 in Fig. 14 B) is pertaining to the user defined area (see "home" in Fig. 14 B), which is pertaining to the class type "home", with the broadest reasonable interpretation, the claimed limitations are made obvious by **Kuwahara** for wirelessly transmitting information (location information) **pertaining** to the class type (home) as claimed.

Regarding claims 33, 35, 46-47, they are interpreted and rejected for the same reason as set forth in claim 31 above. In addition, **Kuwahara** discloses ringer mode on/off (sound or vibration) and call forwarding as claimed (see Fig. 13, 21 and col. 9, lines 3-5).

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Regarding claims **7, 19, 32, 37, 45, Kuwahara** discloses all the claimed limitations, see claim **6** above, except for the phone setting is on/off. However, to turn the phone off when in a restricted area such as hospital is known in the art (Official Notice). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Kuwahara** for setting the phone on/off as claimed, for preventing radiation hazardous when in a restricted area such as hospitals.

Regarding claims **10, 20, 34, 39, Kuwahara** discloses all the claimed limitations, see claim **6** above, except for the pitch of a ringer. However, since setting the pitches of phone ringer for different locations is known in the art (Official Notice), it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Kuwahara** for setting the pitches of a ringer at different locations as claimed, for audibly alerting a user of an incoming call at the best performance for each environment within which it is placed.

Regarding claims **43-44**, they are interpreted and rejected for the same reason as set forth in claim **42** above. In addition, **Kuwahara** discloses providing a transmitter (base station) at the location and the behavior is defined by the phone setting as claimed (see Figs. 14A and 21).

9. Claim **13** is rejected under 35 U.S.C. 103(a) as being unpatentable by **Kuwahara** in view of **Te-~~eni~~** (PCT WO 99/55102).

Regarding claim **13, Kuwahara** discloses all the claimed limitations, see claim **6** above, except for receiving phone setting information. However, **Te-~~eni~~** discloses a

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mobile terminal (cellular phone) capable of executing location-related services such as phone settings based on different environments such as hospital airplane (see col. 3, line 22 - col. 4, line 14), wherein an application interface is configured to wirelessly receive phone setting information (see col. 21, lines 1-4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the above teaching of **Te-eni** to **Kuwahara** for setting the phone behavior according to a command received in a restricted area as well, for obeying regulations of the restricted area when it is located therein.

10. Claims **50-52, 56** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Kuwahara** in view of **Wax** (US Patent Number **6,104,344**).

Regarding claim **50**, **Kuwahara** discloses all the claimed limitations, see claim **6** above, except for a hierarchical tree structure to ascertain the present location.

However, **Wax** discloses a hierarchical tree structure for determining a geographical location from measured wireless signals (see Fig. 3, col. 7, line 34 – col. 8, line 54).

Here, since **Kuwahara** discloses a Boolean operation is used for ascertain the present location (see col. 8, lines 1-29), and since **Kuwahara** and **Wax** both disclose a method for searching a location, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the above teaching of **Wax** to **Kuwahara** for using a hierarchical tree structure searching as well, for improving the performance of the location calculation.

Regarding claims **51-52, 56**, they are interpreted and rejected for the same reason as set forth in claim **50** above, wherein the "location information" would read on the "phone context".

11. Claims **2, 5, 6, 11, 14** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Alperovich et al** (US Patent Number **6,233,448**).

Regarding claim **5**, **Alperovich** discloses a method and apparatus for automatic activating/deactivating features (read on modify phone behaviors/settings) based on the position of a mobile station (see Abstract), comprising ;

- receiving information pertains to a current context (location) of a cellular phone (see col. 3, lines 29-52);
- determining the current location (see col. 3, lines 29-52);
- modify at least one behavior of the cellular phones (activating a feature)

Here, although **Alperovich** is silent on the application program interface, it is noted that in order to receive information for determining the position coordinates of the mobile and activating pre-selected features according to the position coordinates (see Fig. 2 and col. 7, lines 26-38), a microprocessor or application program interface would obviously be needed to carry out the above process. Therefore, the claimed limitation is made obvious by **Alperovich** for providing an application program interface as claimed, in order to receive and process information for utilizations.

Regarding claim **2**, it is rejected for the same reason as set forth in claim **5** above. In addition, since **Alperovich** discloses a variety of methods for calculating a position based on GPS signals or from signals received from a plurality of base stations (see col. 3, lines 29-52). Therefore, it would have been obvious to one of ordinary skill in

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the art at the time the invention was made to further modify the above teaching of **Alperovich** for providing a location service module as claimed, for improving the position accuracy by utilizing a plurality of signals from different providers so that the most reliable signal could be used for location estimation (i.e, GPS signals is not reliable when the mobile is located inside an urban area having many high-rise buildings).

Regarding claims **6, 14**, they are rejected for the same reason as set forth in claim **2** above.

Regarding claim **11**, it is rejected for the same reason as set forth in claim **6** above. In addition, Alperovich discloses the behavior pertains to forwarding calls (see col. 5, lines 1-20).

12. Claims **4, 50-52, 56** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Alperovich** in view of **Wax** (US Patent Number **6,104,344**).

Regarding claim **4**, **Alperovich** discloses all the claimed limitations, see claim **5** above, except for a hierarchical tree structure to ascertain the present location. However, **Wax** discloses a hierarchical tree structure for determining a geographical location from measured wireless signals (see Fig. 3, col. 7, line 34 – col. 8, line 54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the above teaching of **Wax** to **Alperovich** for using a hierarchical tree structure in determining a location as well, for improving the performance of the location calculation.

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13. Claims **7-12, 14-27, 29-47, 54, 57-58** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Alperovich** in view of **Kuwahara** (US Patent Number **6,389,288**).

Regarding claim **8, Alperovich** discloses all the claimed limitations, see claim **6** above, except for activating phone setting features. However, **Kuwahara** discloses a mobile terminal (cellular phone) capable of executing location-related services such as phone settings, call settings (Figs. 1, 13, 21, and col. 7, line 52 - col. 8, line 52). Since **Alperovich** and **Kuwahara** both discloses a method for modifying a phone behavior based on the location, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the above teaching of **Kuwahara** to **Alperovich** as well, for setting the phone operations at different locations as claimed, for alerting a user of an incoming call at the best performance for each environment within which it is placed.

Regarding claims **9, 11-12, 14-18, 21-27, 29-30**, they are interpreted and rejected for the same reason as set forth in claim **8** above. In addition, **Kuwahara** discloses

- multiple different context providers (see col. 8, lines 1-15);
- sound or vibration would read on "ringer mode on/off" (see Figs. 13, 21);
- computer-readable media (see control unit 403 in Fig. 4);
- change behavior when no longer at the current location (see steps S43, S44 in Fig. 25);

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- location type (office, meeting room) with attributes (setting of screening, alert mode) defining a behavior (see area names and zones in Figs. 13, 21);

- call forwarding behavior (see setting of call destination, col. 9, lines 3-5);

Regarding claims **31, 42**, they are interpreted and rejected for the same reason as set forth in claim **8** above. In addition, since the reported location information (see Zones 1, 2, 3 in Fig. 14 B) is pertaining to the user defined area (see "home" in Fig. 14 B), which is pertaining to the class type "home", with the broadest reasonable interpretation, the claimed limitations are made obvious by **Alperovich** and **Kuwahara** for wirelessly transmitting information (location information) **pertaining** to the class type (home) as claimed.

Regarding claims **33, 35, 46-47**, they are interpreted and rejected for the same reason as set forth in claim **31** above. In addition, **Kuwahara** discloses ringer mode on/off (sound or vibration) and call forwarding as claimed (see Fig. 13, 21 and col. 9, lines 3-5).

Regarding claims **36, 41**, they are interpreted and rejected for the same reason as set forth in claim **8** above. In addition, **Kuwahara** defines class types (see home, office, library in Fig. 13), each one is associated with a location (see Zones in Fig. 13) and various attributes (see setting of screening, alert mode in Fig. 13) defining a behavior as claimed.

Regarding claims **38, 40**, they are interpreted and rejected for the same reason as set forth in claim **8** above. In addition, **Kuwahara** discloses the behavior pertains to

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“ringer mode on/off” (see sound or vibration, Figs. 13, 21) and call forwarding behavior (see setting of call destination, col. 9, lines 3-5) as claimed.

Regarding claims **54, 57-58**, they are interpreted and rejected for the same reason as set forth in claim **8** above. In addition, the report location information detecting means 1 in Fig. 1 would read on the “context service module” and the report location information managing means 2 would read on the “application program interface” as claimed (see Kuwahara, Fig. 1).

Regarding claims **7, 19, 32, 37, 45, Alperovich** and **Kuwahara** discloses all the claimed limitations, see claim **8** above, except for the phone setting is on/off. However, to turn the phone off when in a restricted area such as hospital is known in the art (Official Notice). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Alperovich** and **Kuwahara** for setting the phone on/off as claimed, for preventing radiation hazardous when in a restricted area such as hospitals.

Regarding claims **10, 20, 34, 39, Alperovich** and **Kuwahara** discloses all the claimed limitations, see claim **8** above, except for the pitch of a ringer. However, since setting the pitches of phone ringer for different locations is known in the art (Official Notice), it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Alperovich** and **Kuwahara** for setting the pitches of a ringer at different locations as claimed, for audibly alerting a user of an incoming call at the best performance for each environment within which it is placed.

Regarding claims **43-44**, they are interpreted and rejected for the same reason as set forth in claim **42** above. In addition, **Kuwahara** discloses providing a transmitter (base station) at the location and the behavior is defined by the phone setting as claimed (see Figs. 14A and 21).

Response to Arguments

14. Applicant's arguments with respect to claims 2-27, 29-48, 50-58 have been considered but are moot in view of the new ground(s) of rejection.

15. As to claim 48, Applicant's response filed on 4/5/04 regarding the support for the limitation of claim 48 in pages 15-17 is not persuasive. Here, the support is largely based on the feature of "transmitting cell phone setting information to cell phones by enforcement entities". However, it is noted that the feature of "transmitting cell phone setting information to cell phones by enforcement entities" does not involve the location information setting. Therefore, the disclosure as described in the specification, page 54, line 19 – page 55, line 12 is similar to the disclosure described in PCT WO 99/55102 issued to **Te-eni**, **page 21, lines 1-4**, and fail to support the limitations of claim 48.

16. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for formal communications intended for entry)
(for informal or draft communications, please label "PROPOSED" or "DRAFT")

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist).

Any inquiry concerning this communication or communications from the examiner should be directed to Duc M. Nguyen whose telephone number is (703) 306-4531, Monday-Thursday (9:00 AM - 5:00 PM). Or to Vivian Chin (Supervisor) whose telephone number is (703) 308-6739.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Duc M. Nguyen



June 18, 2004